

# Maternal Mortality and Morbidity Review in Massachusetts

May 2002

## In Brief: A Guide for Safe Motherhood

### Key Findings

#### Pregnancy-Associated Injury Deaths, 1990-1999

##### Scope of the Problem

Violence, drug overdoses, motor vehicle collisions or other injuries caused one in three pregnancy-associated deaths. For every 100,000 births 9 women died from injury related causes during pregnancy, childbirth or her first year postpartum. Although rare, these deaths are sentinel events that represent an untold number of women with preventable injuries occurring during pregnancy and postpartum.

##### Causes of Injury Deaths

Homicide was the leading cause of pregnancy-associated injury deaths (38%). The majority of these murders were known or alleged domestic violence. Motor vehicle collisions and drug overdoses, respectively, accounted for 26% and 20% of pregnancy-associated injury deaths.

#### Supporting Safe Motherhood

**Screen and rescreen** all pregnant and postpartum women at regular intervals for

- domestic violence and other physical, sexual, and emotional abuse
- suicidal behavior and/or ideation
- depression and postpartum depression
- alcohol, tobacco and drug use
- routine & proper seatbelt use

**Educate** all pregnant and postpartum women about domestic violence, postpartum depression, substance use and routine and proper seatbelt use.

**Document** screening results and injuries carefully and thoroughly.

**Advise and counsel** women about resources and support.

**Institute policies and protocols** for screening and referral processes.

**Promote** a comprehensive response to injury prevention in your community

**Reduce the stigma** associated with domestic violence, suicide, mental illness, and substance use.

**Respect and be sensitive** to a woman's culture and language.

**Recognize** the complexity and context of women's lives.

Full report available from:  
Massachusetts Department of Public Health  
Bureau of Family and Community Health  
Massachusetts Maternal Mortality and Morbidity Study  
[www.mass.gov/dph/bfch/mcfh/safemoms.htm](http://www.mass.gov/dph/bfch/mcfh/safemoms.htm)  
Tel: 617-624-6060 • Fax: 617-624-6062 • TTY: 617-624-5992

#### Women at Risk

Among pregnancy-associated injury deaths, black non-Hispanic women and Hispanic women were, respectively, four times and two times more likely to die from injury causes than white non-Hispanic women. Younger women (ages 15-24) were three times as likely to die than older women (ages 25-44). Low-income women with public insurance at delivery were 7.5 times as likely to die as women with private insurance. Homicide was the leading cause of injury death for black non-Hispanic women and Hispanic women, and motor vehicle collision was the leading cause for white non-Hispanic women.

#### Timing of Deaths

The majority of injury deaths (76.3%) occurred in the late postpartum period (42-364 days); 11.7% of injury deaths occurred during pregnancy and 12.5% occurred within 42 days postpartum.

#### Points of Opportunity for Preventing Pregnancy-Associated Injury Deaths

The timing of these deaths underscores the need for all health care providers and public health professionals working with pregnant women and parents of infants to participate in prevention efforts. Although rare, these untimely deaths also provide clues for understanding maternal morbidity and improving women's health in general. While pregnancy-associated mortality is lower in Massachusetts than other states, we can make motherhood safer by viewing every encounter with pregnant and parenting women as an opportunity to prevent mortality and morbidity associated with violence, substance abuse, and motor vehicle injuries.

### Safe Motherhood Injury Prevention Self-Assessments

#### All Health Care Providers Do I...

- Screen all pregnant and parenting women for physical, sexual and/or emotional abuse? Re-screen all women for domestic violence regardless of past screening results?
- Screen all pregnant and parenting women for substance use? Re-screen all women for substance use regardless of past screening results?
- Screen all pregnant and parenting women for seat belt use during and after pregnancy?
- Incorporate suicide-risk and depression screening into routine encounters with pregnant and postpartum women?
- Have a strategy for confidentially screening women for domestic violence and other at-risk behaviors when her spouse or significant other, older children or family members are present?
- Screen, counsel and educate using practices that reflect an understanding of and respect for a woman's culture?
- Assess patients with a history of substance abuse for postpartum relapse?
- Give all women, regardless of disclosure, information about community resources for domestic violence and substance abuse?
- Provide instruction on how to properly position the seatbelt during pregnancy?
- Counsel postpartum women about vehicle safety, including distracted and drowsy driving?
- Provide referral to the appropriate community resources, if a woman presents with domestic violence, suicidal ideation, mood disorders, depression, postpartum depression or substance abuse?
- Help a patient who discloses domestic violence assess her risk and develop a safety plan?
- Document the occurrence of past or current domestic violence, or substance use/abuse or chronic or postpartum depression appropriately in the medical chart?

#### If I am an obstetric provider Do I also...

- Screen all pregnant and postpartum women for domestic violence according to ACOG guidelines?
- Counsel pregnant women and women in the early postpartum period about postpartum depression?

#### If I am a pediatric provider Do I also...

- Screen all pregnant and parenting women for domestic violence at regular intervals during the first year postpartum according to American Academy of Pediatrics' policy?
- Assess mothers' emotional and psychological state and conduct screening for postpartum depression as part of well child visits?

- Obtain a substance use history on both parents?
- Provide counseling about maternal use of seatbelts and safe driving with children when I counsel mothers or pregnant women about infant passenger safety?

#### Hospitals & Ambulatory Care Facilities Do we...

- Have a screening protocol for domestic violence, substance use and seat belt use during pregnancy and the first year postpartum?
- Encourage providers and staff to educate pregnant women about routine and proper seatbelt use?
- Provide clients with language-appropriate information and educational materials, including pamphlets and posters, to encourage routine seatbelt use during pregnancy and safe driving with children?
- Have resources/materials and referral lists about seatbelt use, domestic violence, substance use/abuse, and postpartum depression available in the languages of our facility's patient population?
- Consider screening and counseling for domestic violence, substance abuse and postpartum depression as part of our facility's quality improvement activities?
- Offer culturally competent training to appropriate health care personnel, including interpreters, on vehicle safety counseling, domestic violence, suicide, postpartum depression, and other mental illness during pregnancy and the postpartum period?

#### Community Providers, Programs & Agencies Do we...

- Integrate screening for history of domestic violence, depression, postpartum depression, suicidal behavior, other mental illness or substance abuse as part of our outreach efforts to pregnant and postpartum women?
- Screen clients who are pregnant for proper seatbelt use?
- Have information and resources related to domestic violence, substance abuse, and postpartum depression, seatbelt use available if a client requests them? Have materials that are culturally and linguistically appropriate to the population of women our program serves?
- Help a client who discloses domestic violence assess her risk and provide referrals to community providers with special expertise?
- Provide culturally competent training on domestic violence, substance use, and postpartum depression for staff?
- Actively engage in violence prevention by educating the public about domestic violence?
- *For violence prevention and intervention programs and substance abuse treatment programs, do we have linkages to obstetric, pediatric and other health care providers?*

Domestic Violence

<b>SafeLink</b> 24-Hour DV Hotline	<b>1-877-785-2020</b> English/Spanish <b>1-877-521-2601 (TTY)</b>
<b>Jane Doe, Inc</b> www.janedoe.org	<b>617-248-0922</b> Resources and referrals for victims of domestic violence and sexual assault. Online statewide resource guide
<b>Massachusetts Medical Society</b> www.massmed.org	Comprehensive guide on domestic violence for health care professions
<b>MDPH Sexual Assault Prevention and Survivor Services</b> www.state.ma.us/dph/sapss/sapss.htm	<b>617-624-5457</b>
<b>Llámanos</b>	<b>1-800-223-5001</b> Spanish language sexual assault hotline
<b>Family Violence Prevention Fund</b> www.fvpf.org	<b>415-252-8900</b> Resources on screening and documentation guidelines, protocol development, training for providers and organizations
<b>Massachusetts Domestic Violence Fact Sheet</b> www.state.ma.us/ccj/dvfact.htm	Information about domestic violence in Massachusetts
<b>American College of Obstetricians &amp; Gynecologists</b> www.acog.org/goto/noviolence	Screening tools, guidelines and other resources for clinicians

Promoting Safe Motherhood:  
A Guide to Resources

Substance Abuse

<b>Massachusetts Substance Abuse Information and Education Helpline</b>	<b>1-800-327-5050</b> Substance abuse and use helpline and referral to appropriate services. Direct information about drug and education helpline use and abuse and referral to appropriate treatment services
<b>Massachusetts Department of Public Health</b> www.state.ma.us/dph/bsas/bsas.htm	<b>617-624-5111</b> Bureau of Substance Abuse Services Directory of services, resources for providers, and related links
<b>Institute for Health and Recovery</b> www.healthrecovery.org	<b>617-661-3991</b> Information and assistance for families needing services
<b>Online Resource for Substance Abuse Services</b> www.helpline-online.com/asp/FindServicesNearYou.asp	Directory of drug and alcohol treatment services programs in Massachusetts
<b>Substance Abuse Treatment Facility Locator</b> http://findtreatment.samhsa.gov/	Directory of national, regional and local drug and alcohol treatment programs

Postpartum Depression

<b>American Association of Family Practice (AAFP)</b> www.aafp.org/afp/990415ap/2247.html	Offers information on postpartum depression for clinicians
<b>Office on Women's Health, Department of Health and Human Services</b> www.4woman.gov/owh/pub/factsheets/postpartum.htm	Information about postpartum depression including definitions, signs and symptoms, risk factors, and treatment options
<b>Depression After Delivery Inc. (DAD)</b> www.depressionafterdelivery.com	<b>1-800-944-4PPD</b> Nonprofit offering consumer support and resources
<b>Postpartum Depression Screening Tools</b> www.clinical-supervision.com/edinburgh%20scale.htm www.wpspublish.com	Screening tools to use in clinical settings Edinburgh Postnatal Depression Scale  Postpartum Depression Screening Scale

Suicide Prevention

<b>National 24-Hour Suicide Hotline</b>	<b>1-800-SUICIDE</b>
<b>Samaritans of Boston</b>	<b>617-247-0220</b> 24-Hour Hotline
<b>Samaritans of Boston</b> www.samaritansofboston.org	<b>617-536-2460</b>
<b>Samaritans of Merrimack Valley</b>	<b>978-688-0030</b>
<b>West Suburban Samaritans</b>	<b>508-872-1780</b>
<b>Samaritans of Cape Cod &amp; the Islands</b>	<b>508-548-7999</b>
<b>Fall River/ New Bedford Samaritans</b>	<b>508-999-7267</b>
<b>American Foundation for Suicide Prevention</b> www.afsp.org	<b>1-888-333-AFSP</b> (National) <b>617-439-0940</b> (Boston) Resources for suicide prevention, including screening guidelines and general information
<b>National Strategy for Suicide Prevention</b> www.mentalhealth.org/suicideprevention	Outlines goals and objectives of the National Strategy to Prevent Suicide

Injury Prevention

<b>Massachusetts Car-Safe Help Line</b>	<b>1-800-CAR-SAFE (227-7233)</b> Answers to questions about automobile safety
<b>Regional Center for Poison Control and Prevention</b>	<b>1-800-222-1222</b> <b>1-888-244-5313 (TDD)</b>
<b>Injury Prevention Yellow Pages</b>	<b>617-624-5426</b> Community, state, and national resources for injury prevention
<b>Injury Prevention and Control Program</b> www.state.ma.us/dph/uninj/inj.htm	Massachusetts Department of Public Health